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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,990	03/29/2001	Isao Minematsu	57454-060	3710

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McDERMOTT, WILL & EMERY
600 13th Street, N. W.
Washington, DC 20005-3096

EXAMINER

PAN, DANIEL H

ART UNIT	PAPER NUMBER
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2183

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/819,990

Applicant(s)

MINEMATSU, ISAO

Examiner

Art Unit

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 1-14 are presented for examination.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kudo et al. (6,560,692).

3. AS to claim 1, Kudo disclosed at least :

a) program control unit for fetching instructions (fetching of the instruction no explicitly shown)

b) instruction decoder for decoding the instructions (col.11, lines 40-61 for the decoding of the specific stack pointer instructions, see also col.23, lines 22-23, col.26, lines 60-64);

c) address operation unit on the basis of the decoding result (col.26, lines 36-56 for the address selection);

d) data operating unit executed the transfer between registers and the transfer between registers and a memory [stack] in response to a single instruction code (see the data transfer between the register and the stack memory by the push instruction in col.15,

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lines 20-28, col.25, lines 29-67, see also the transfer of the special register to general purpose register in col.26, lines 30-35, see also all other specific stack pointer instructions in col.14, lines 44-53).

4. Kudo did not explicitly show the fetching of the instructions as claimed. Instead , it showed the execution of the instructions (see e.g. the execution routine in figs21,22). However, it should be clear that any instruction should be fetched before gets executed; the execution unit has to receive instruction first before executing the instruction. Therefore, for this reason, the fetching of the instructions is being implicitly taught by Kudo (see also the transfer of instructions from ROM in col.18, lines 29-31).

5. As to claim 2, Kudo also disclosed transfer of the data from a first register [general purpose] to a memory [stack] and transfer the data from a second register [special register] to the first register [general purpose register] (e.g. see transfer of data by push col.26, lines 30-35).

6. As to claims 3, 7, Kudo also decremented and incremented the pointer (e.g. see the update of the SP in col.13, lines 9-43).

7. As to claims 4,8, first register of Kudo was a working register (general purpose).

8. As to claims 5,9, Kudo's second register was a control register (special register).

9. As to claim 6, Kudo also taught transfer of the data in first register to second and the transfer in memory to the first (see the transfer of data by pop instruction in col.26,lines 30-35).

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10. As to claim 10, Kudo also kept the value of stack pointer unchanged for a single push (e.g. see the latched stack pointer value in latch (Add_LT) 32 at the end of the push col.27, lines 10-30).

11. As to claims 11,13, Kudo also included at least :

a) a code for reading a code from a source program (e.g. the see source program in fig.4, see also the transfer of the instructions from ROM in col.18, lines 29-36);

b) storage unit for storing information specifying a plurality of registers (see the stack region in fig.4);

c) a first code generating unit for storing information for specifying registers and generating a code to push data when the code was a first macro instruction (e.g. see the assembler for creating the instruction codes for transferring the data from memory to registers in col.17, lines 5-16, see also the push instruction which specified the registers R in fig.4);

d) a second code generating unit for storing information for specifying registers and generating a code to push data when the code was a first macro instruction (e.g. see the assembler for creating the instruction codes for transferring the data from registers to memory in col.17, lines 5-16, see also the pop instruction which specified the registers R in fig.4).

12. As to claims 12,14, Kudo also push data stored in other register (e.g. see the special register in transfer between the stack memory and the special register col.26, lines 30-35).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Woods (3,786,432) is cited for the teaching of the teaching of the push instruction (e.g. see col.3, lines 54-68, col.4, lines 1-8).

b) Langan et al. (5,640,548) is cited for the background teaching in the stack pointer operation (e.g. see col.2, lines 37-58).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 703 305 9696.

The examiner can normally be reached on M-F from 8:00 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 703 305 9712. The fax phone numbers for the organization where this application or proceeding is assigned is are:

- a) before final 703 746 7239;
- b) after final 703 746 7238;
- c) Customer Service 703 746 7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 3900. USPTO Web site can be reached at <http://www.uspto.gov> for general inquiry.

31 Century Strategic Design
DANIEL H. PAN
PRIMARY EXAMINER
GROUP